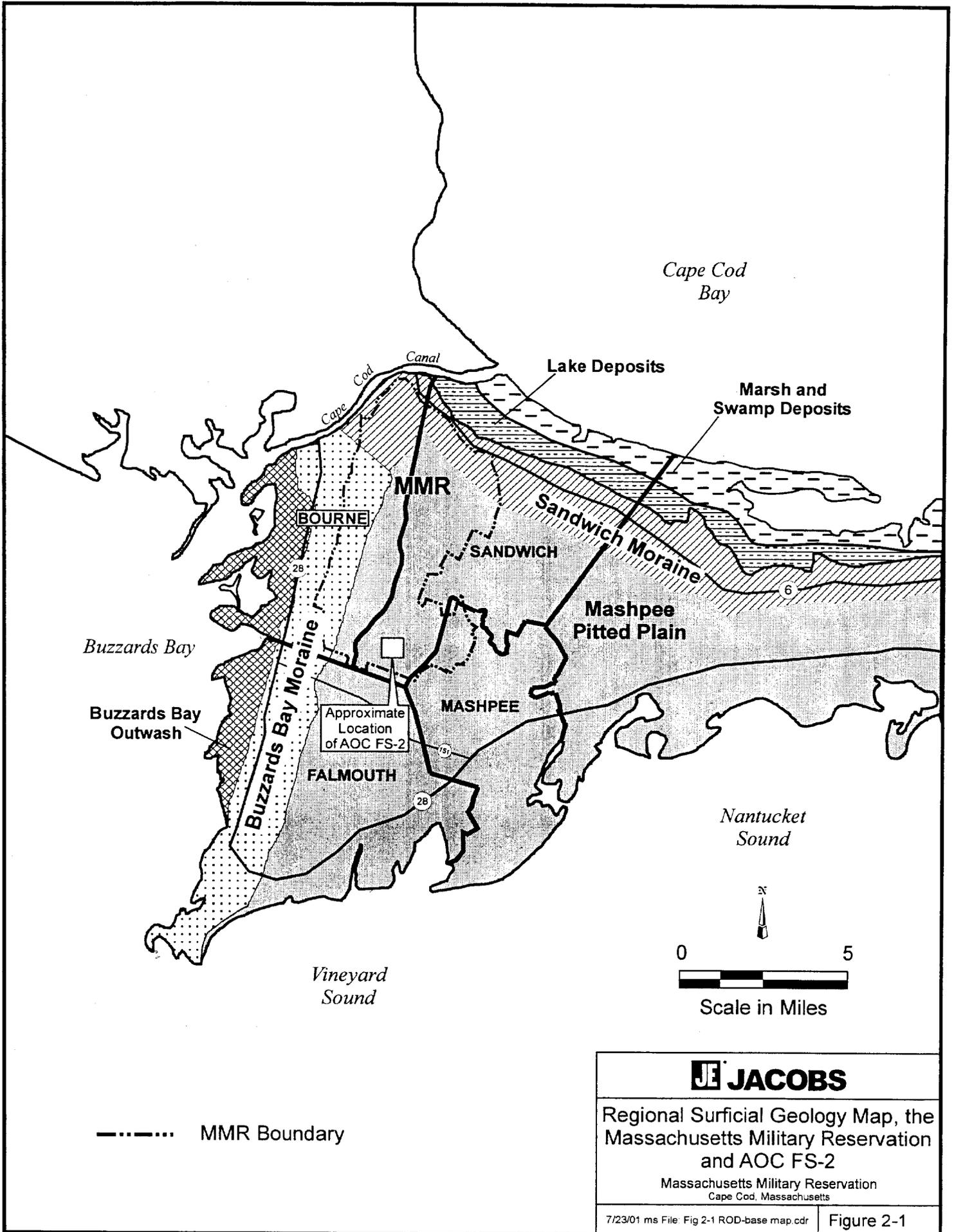


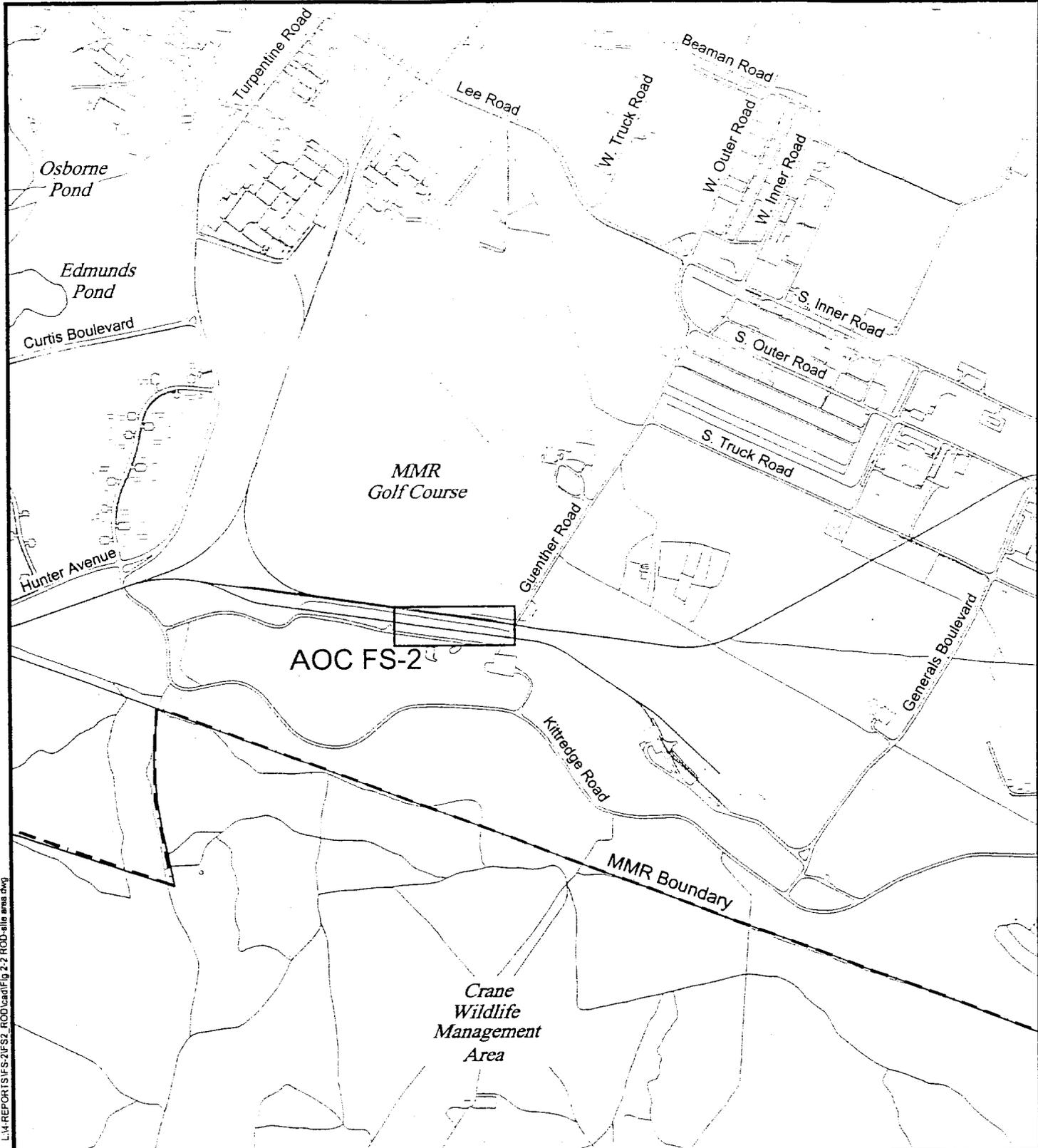
FIGURES



JE JACOBS

Regional Surficial Geology Map, the
Massachusetts Military Reservation
and AOC FS-2

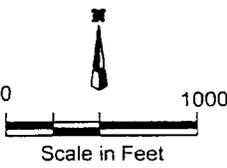
Massachusetts Military Reservation
Cape Cod, Massachusetts



last modified: 07/24/01 printed: 07/24/01 by sr L:\4-REPORTS\FS-2\FS2 ROD\caofig 2-2 ROD-site area.dwg

Legend

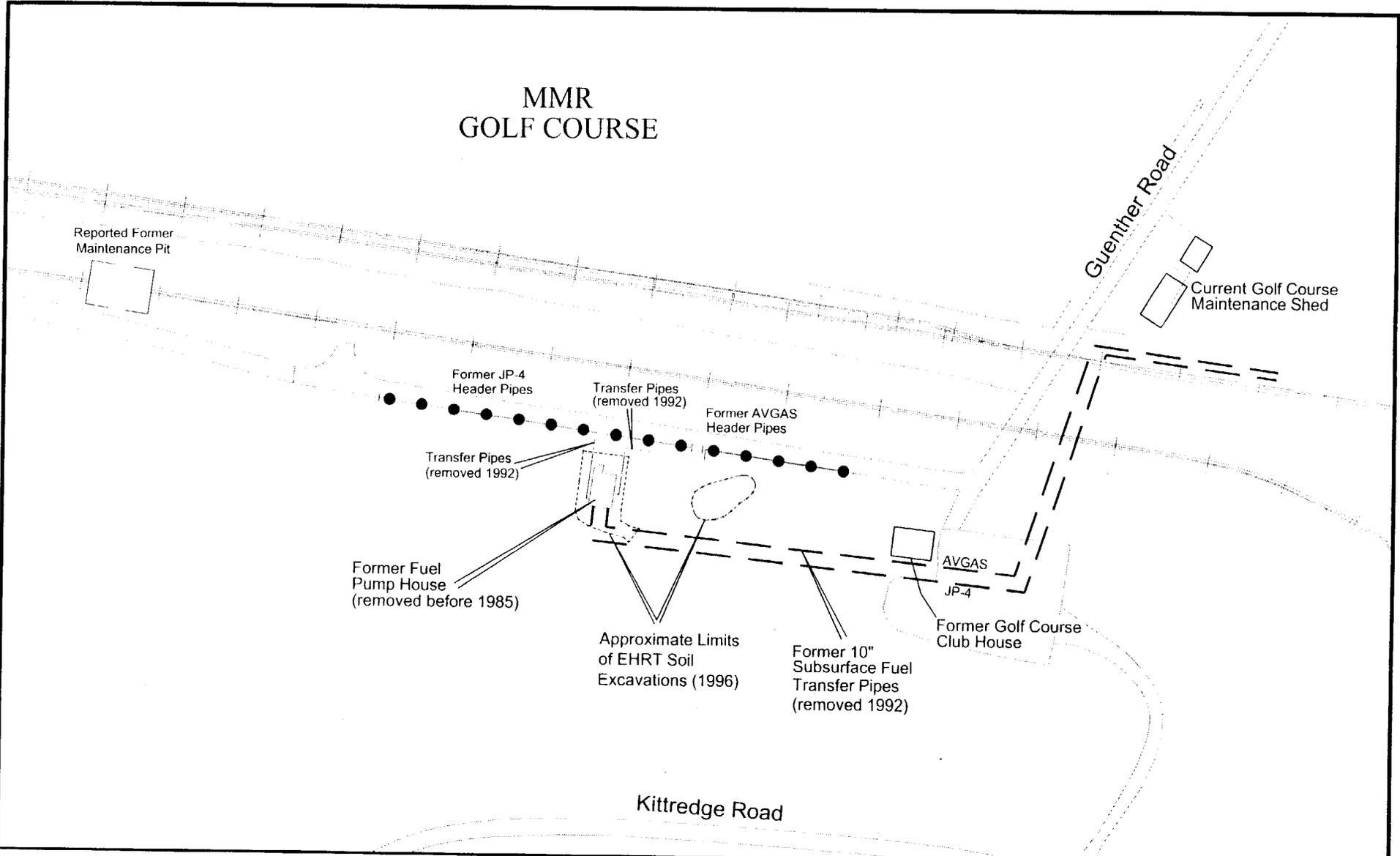
-  MMR Boundary
-  Crane Wildlife Management Area



AOC FS-2 and Surrounding Area

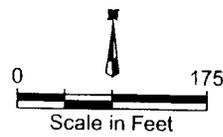
Massachusetts Military Reservation
Cape Cod, Massachusetts

MMR GOLF COURSE



Legend

- Fuel Unloading Headers (Removed 1992)



JACOBS

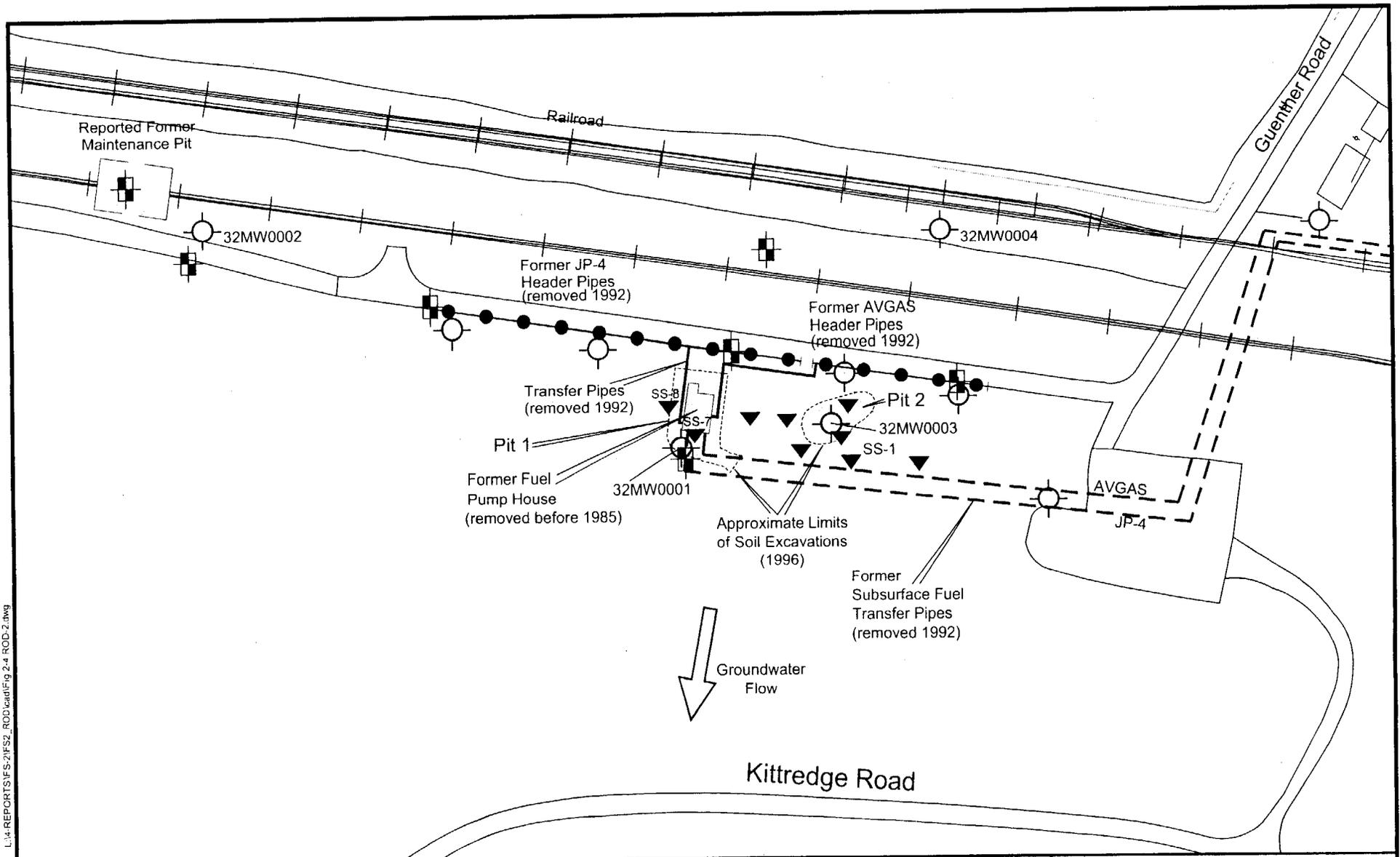
AOC FS-2

Massachusetts Military Reservation
Cape Cod, Massachusetts

07/24/01 MS Fig 2-3 ROD FS-2.dwg

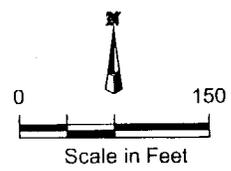
Figure 2-3

L:\4-REPORTS\FS-2\FS2_ROD\atd\Fig 2-4 ROD-2.dwg
last modified: 07/24/01
printed: 07/24/01 by ms



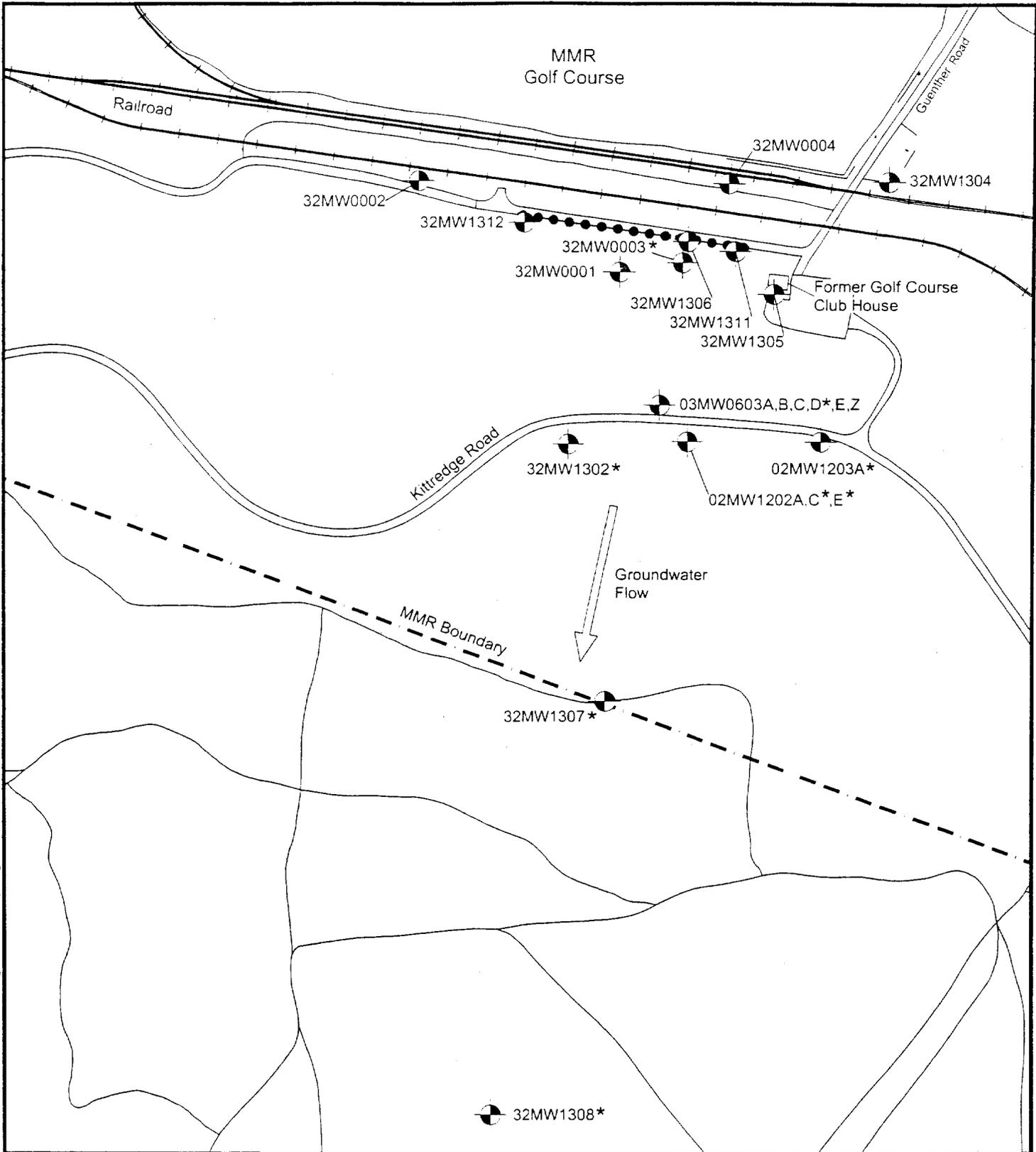
Legend

- ▼ Surface Soil Sample
- ⊠ Test Pit
- Soil Boring / Monitoring Well
- Fuel Unloading Headers



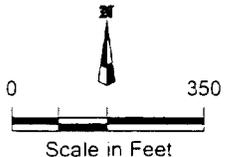
Locations of Soil Sampling Points Used for Pre-2000 Investigations, AOC FS-2
Massachusetts Military Reservation
Cape Cod, Massachusetts

last modified: 07/24/01, printed: 07/24/01 by ms 1:14 REPORTS\F52\F52 ROD\cad\Fig 2-5 ROD GWsample.dwg



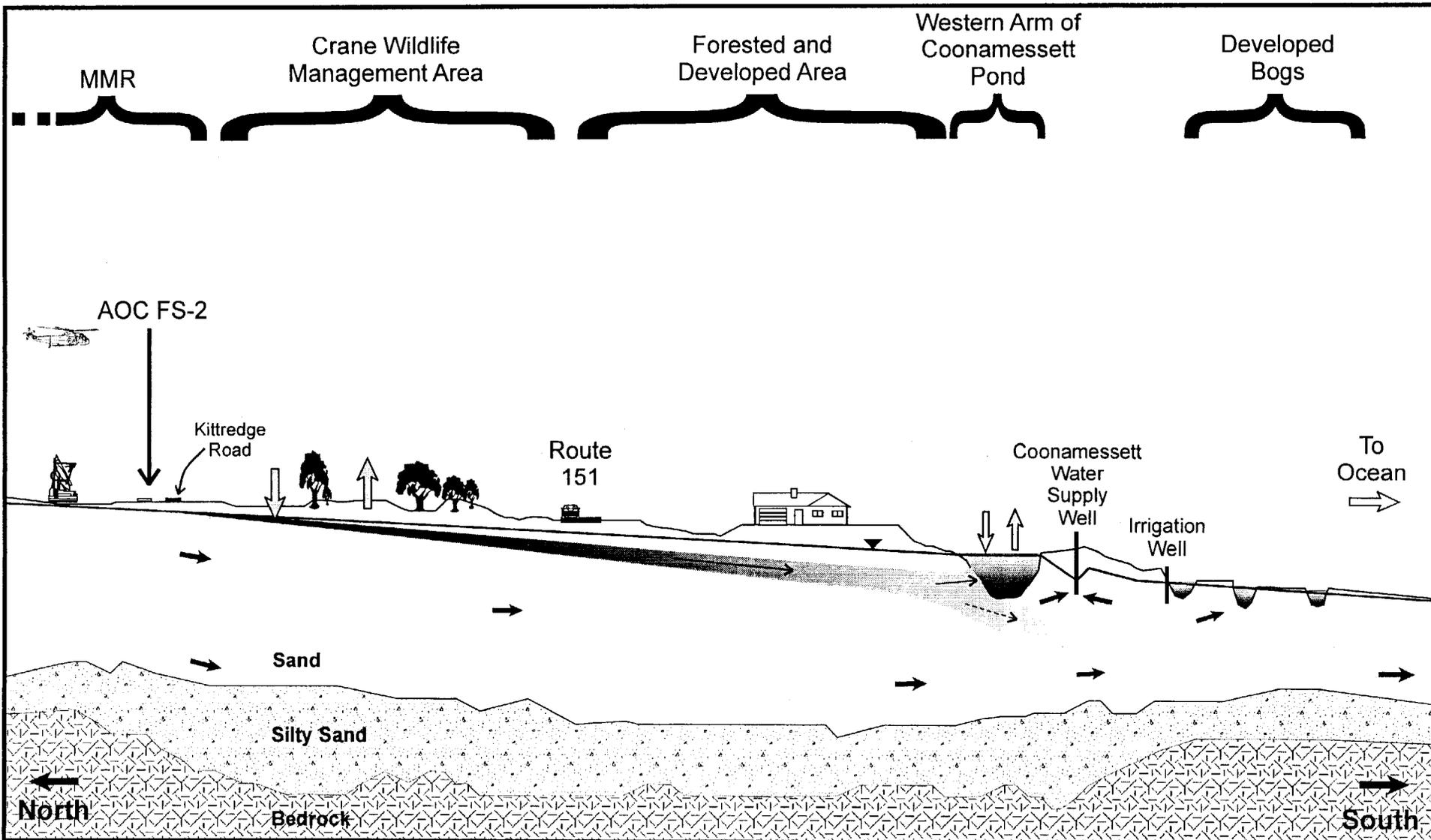
Legend

-  Monitoring Well
-  Fuel Unloading Headers
-  Well Sampled for SWOU RI (1998)



Locations of Groundwater Sampling Points, AOC FS-2

Massachusetts Military Reservation
Cape Cod, Massachusetts



Legend

- Recharge
- Evaporation/Transpiration
- Probable Path of Water from FS-2
- Possible Path of Water from FS-2
- Groundwater Flow
- Water Table
- EDB Ethylene Dibromide

JE JACOBS

Worst-Case Scenario of Historical Contaminant Transport (primarily EDB) from AOC FS-2

Massachusetts Military Reservation
Cape Cod, Massachusetts

Conceptual drawing not to scale.

32BH0010				
	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	620	
Benzo (A) Pyrene	May-00	0-2	360	
Benzo (B) Fluoranthene	May-00	0-2	770	
Dibenz (A, H) Anthracene	May-00	0-2	73	J
Benzo (A) Anthracene	May-00	4-6	1200	
Benzo (A) Pyrene	May-00	4-6	740	
Benzo (B) Fluoranthene	May-00	4-6	1000	
Dibenz (A, H) Anthracene	May-00	4-6	110	J
Benzo (A) Anthracene	May-00	8-10	20	J
Benzo (A) Anthracene	May-00	14-16	450	
Benzo (A) Pyrene	May-00	14-16	280	J
Benzo (B) Fluoranthene	May-00	14-16	340	
Dibenz (A, H) Anthracene	May-00	14-16	45	J
Benzo (A) Anthracene	May-00	18-20	1000	
Benzo (A) Pyrene	May-00	18-20	640	
Benzo (B) Fluoranthene	May-00	18-20	860	
Dibenz (A, H) Anthracene	May-00	18-20	90	J

MMR
GOLF COURSE

Current Golf Course
Maintenance Shed

Reported Former
Maintenance Pit

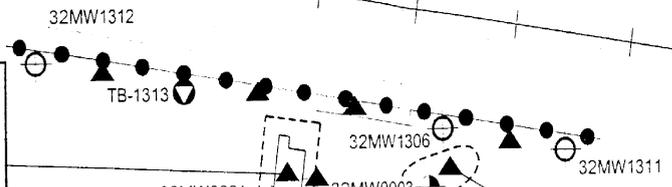
32BH0005				
	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	180	J
Benzo (A) Pyrene	May-00	0-2	150	J
Benzo (B) Fluoranthene	May-00	0-2	250	J
Dibenz (A, H) Anthracene	May-00	0-2	31	J
Benzo (A) Anthracene	May-00	4-6	28	J
Benzo (A) Pyrene	May-00	4-6	25	J
Benzo (B) Fluoranthene	May-00	4-6	31	J

32BH0007				
	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	200	J
Benzo (A) Pyrene	May-00	0-2	170	J
Benzo (B) Fluoranthene	May-00	0-2	210	J
Dibenz (A, H) Anthracene	May-00	0-2	31	J

32BH0006				
	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	170	J
Benzo (A) Pyrene	May-00	0-2	170	J
Benzo (B) Fluoranthene	May-00	0-2	260	J
Dibenz (A, H) Anthracene	May-00	0-2	35	J
Benzo (A) Anthracene	May-00	4-6	180	J
Benzo (A) Pyrene	May-00	4-6	140	J
Benzo (B) Fluoranthene	May-00	4-6	220	J
Dibenz (A, H) Anthracene	May-00	4-6	30	J

32BH0008				
	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	280	J
Benzo (A) Pyrene	May-00	0-2	260	J
Benzo (B) Fluoranthene	May-00	0-2	390	J
Dibenz (A, H) Anthracene	May-00	0-2	40	J

32BH0009				
	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	160	J
Benzo (A) Pyrene	May-00	0-2	140	J
Benzo (B) Fluoranthene	May-00	0-2	200	J
Dibenz (A, H) Anthracene	May-00	0-2	26	J



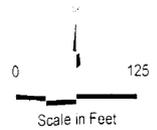
Kitredge Road

Legend

- ▲ Monitoring Well (E.C. Jordan 1990)
- ▲ Soil Boring Locations (Supplemental RI, AFCEE 2000)
- Fuel Unloading Headers
- Test Boring/Monitoring Well (E.C. Jordan 1991)

- Approximate limits of soil removal (EHRT 1996)
- Depth feet below ground surface
- µg/kg micrograms per kilogram
- Test Boring (E.C. Jordan 1991)

- J estimated value
- SVOC semivolatile organic compound



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Distribution of Selected SVOCs in
Soil at AOC FS-2 Supplemental RI
Locations 32BH0005-32BH0010

Massachusetts Military Reservation
Cape Cod, Massachusetts

last modified: 07/24/01 printed: 07/24/01 by: 1:4 REPORT DATE: 24-SEP-01 ROD: case: Fig 2-6 ROD SVOC BH.dwg

32BH0003	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	120	J
Benzo (A) Pyrene	May-00	0-2	110	J
Benzo (B) Fluoranthene	May-00	0-2	140	J
Dibenz (A, H) Anthracene	May-00	0-2	20	J
Benzo (B) Fluoranthene	May-00	8-10	21	J
Benzo (A) Anthracene	May-00	14-16	49	J
Benzo (A) Pyrene	May-00	14-16	43	J
Benzo (B) Fluoranthene	May-00	14-16	54	J
Benzo (A) Anthracene	May-00	18-20	27	J
Benzo (A) Pyrene	May-00	18-20	24	J
Benzo (B) Fluoranthene	May-00	18-20	30	J

32BH0001	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	460	
Benzo (A) Pyrene	May-00	0-2	360	
Benzo (B) Fluoranthene	May-00	0-2	490	
Dibenz (A, H) Anthracene	May-00	0-2	61	J
Benzo (A) Anthracene	May-00	4-6	54	J
Benzo (A) Pyrene	May-00	4-6	41	J
Benzo (B) Fluoranthene	May-00	4-6	51	J
Benzo (A) Anthracene	May-00	8-10	410	J
Benzo (A) Pyrene	May-00	8-10	310	J
Benzo (B) Fluoranthene	May-00	8-10	440	
Dibenz (A, H) Anthracene	May-00	8-10	61	J
Benzo (A) Anthracene	May-00	18-20	4100	
Benzo (A) Pyrene	May-00	18-20	2400	
Benzo (B) Fluoranthene	May-00	18-20	4200	
Dibenz (A, H) Anthracene	May-00	18-20	410	

32BH0004	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	230	J
Benzo (A) Pyrene	May-00	0-2	190	J
Benzo (B) Fluoranthene	May-00	0-2	230	J
Dibenz (A, H) Anthracene	May-00	0-2	26	J
Benzo (A) Anthracene	May-00	4-6	64	J
Benzo (A) Pyrene	May-00	4-6	64	J
Benzo (B) Fluoranthene	May-00	4-6	71	J
Benzo (A) Anthracene	May-00	8-10	810	
Benzo (A) Pyrene	May-00	8-10	520	
Benzo (B) Fluoranthene	May-00	8-10	760	
Dibenz (A, H) Anthracene	May-00	8-10	69	J
Benzo (A) Anthracene	May-00	14-16	270	J
Benzo (A) Pyrene	May-00	14-16	200	J
Benzo (B) Fluoranthene	May-00	14-16	270	J
Dibenz (A, H) Anthracene	May-00	14-16	22	J
Benzo (A) Anthracene	May-00	18-20	29	J
Benzo (A) Pyrene	May-00	18-20	19	J
Benzo (B) Fluoranthene	May-00	18-20	28	J

32BH0002	Date	Depth	Concentrations in µg/kg	Qualifier
Benzo (A) Anthracene	May-00	0-2	760	
Benzo (A) Pyrene	May-00	0-2	600	
Benzo (B) Fluoranthene	May-00	0-2	790	
Dibenz (A, H) Anthracene	May-00	0-2	110	J
Benzo (A) Anthracene	May-00	4-6	2300	
Benzo (A) Pyrene	May-00	4-6	2000	
Benzo (B) Fluoranthene	May-00	4-6	2500	
Dibenz (A, H) Anthracene	May-00	4-6	360	
Benzo (A) Anthracene	May-00	8-10	22	J
Benzo (A) Pyrene	May-00	8-10	26	J
Benzo (B) Fluoranthene	May-00	8-10	34	J
Dibenz (A, H) Anthracene	May-00	8-10	45	J
Benzo (A) Anthracene	May-00	14-16	73	J
Benzo (A) Pyrene	May-00	14-16	85	J
Benzo (B) Fluoranthene	May-00	14-16	98	J
Benzo (A) Anthracene	May-00	18-20	21	J
Benzo (A) Pyrene	May-00	18-20	20	J
Benzo (B) Fluoranthene	May-00	18-20	26	J

MMR
GOLF COURSE

Reported Former
Maintenance Pit

32MW1312

TB-1313

32MW1306

32MW0003

32MW1311

32MW0001

AVGAS

JP-4

Kittredge Road

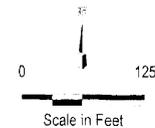
Legend

- Monitoring Well (E.C. Jordan 1990)
- Soil Boring Locations
- Fuel Unloading Headers
- Test Boring/Monitoring Well (E.C. Jordan 1991)



- Approximate limits of soil removal (EHRT 1996)
- Depth feet below ground surface
- µg/kg micrograms per kilogram
- Test Boring (E.C. Jordan 1991)

- J estimated value
- SVOC semivolatile organic compound



JACOBS

Distribution of Selected SVOCs
in Soil Along the Former Header
Pipes at AOC FS-2

Massachusetts Military Reservation
Cape Cod, Massachusetts

last modified: 07/24/01 - path: L:\4. REPORTS\FS-2\FS2 ROD\arsenic.dwg 2 8 ROD arsenic.dwg

32BH0003	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	1.8	J

32BH0004	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	0.64	J

32BH0002	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	2	J

32BH0001	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	1.4	J

32BH0010	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	7.3	

32BH0005	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	0.95	J

32BH0006	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	0.83	J

32BH0007	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	1.8	J

32BH0008	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	2.3	J

32BH0009	Date	Depth	Concentrations in mg/kg	Qualifier
As	May-00	0-2	1.4	J

MMR
GOLF COURSE

Reported Former
Maintenance Pit

32MW1312

TB-1313

32MW1306

32MW1311

32MW0001

32MW0003

AVGAS

JP-4

Guenther Road

Kittridge Road

Legend

-  Monitoring Well (E.C. Jordan 1990)
-  Soil Boring Locations
-  Fuel Unloading Headers
-  Test Boring (E.C. Jordan 1991)



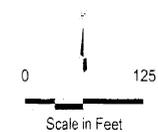
Approximate limits of soil removal (EHRT 1996)

Depth feet below ground surface

mg/kg milligrams per kilogram

 Test Boring (E.C. Jordan 1991)

J estimated value



Distribution of Total Arsenic
in Soil at AOC FS-2

Massachusetts Military Reservation
Cape Cod, Massachusetts